pplication of:

For:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Group Art Unit: 1721

Serial No.: 08/869,109

Chesser, et al. <

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Examiner: C. H. Kelly

Filed: June 4, 1997

Controlled Hydration of Starch

§ in High Density Brine Dispersion Atty. Docket: B154-9245C-US

RESPONSE TO FIRST OFFICE ACTION

Assistant Commissioner for Patents Washington, D.C. 20231

This paper is filed in response to the office action mailed April 30, 1999.

AMENDMENTS

(Three times amended) A method for [producing a precursor] hydrating a 1. water soluble polymer [dispersion] for addition to a brine for use in drilling and completion operations comprising:

providing a precursor brine comprising an aqueous solution of a first salt at a first density, said first salt comprising cations consisting essentially of cations of one or more multivalent alkaline earth metals; and

mixing [a] said water-soluble polymer with said precursor brine at a first concentration and under first conditions, wherein said first density, said first concentration, and said first conditions are effective to produce a precursor polymer dispersion comprising particles of said water-soluble polymer at a level of prehydration;

wherein, even absent other solvating agents [upon] addition of a sufficient quantity of said precursor polymer dispersion to a final brine comprising an aqueous